

REMARKS/ARGUMENTS

Claims 13-16, 18-22, 25-27, 29-31, 34, and 36-46 remain in this application.

Rejections Under 35 USC 103

1: Office Action (restatement of arguments previously put forth in the previous Amendment submitted October 24, 2008)

Claims 13-16, 18-22, 25-27, 29-31, 34, and 36-46 were rejected under 35 USC 103(a) as being unpatentable over US Patent No. 6,126,969 (the '969 Patent) in view of US Patent No. 5,885,616 (the '616 Patent). See Pages 3-5 of the Office Action. According to the Office Action,

“The '969 Patent teaches a dosage form comprising an immediate release drug portion and a controlled release drug portion (abstract). . . . The reference is silent to the ratio of the instant claims. The ratio is well within the level of skill in the art as seen in the '974 Patent. The '974 patent discloses a combination extended/immediate release formulation comprising a mixture of immediate release drug particle combined with coated sustained release drug particles (abstract). . . . The coatings for the extended release particles include a mixture of film forming polymers such as cellulose acetate and ethylcellulose while enteric polymers such as acrylic and methacrylic acid copolymers (col. 7, lin. 1-10). The ratio of film forming polymers to enteric polymers is 0.14:0.74 within the limits of the instant claims (examples). . . . It would have been obvious to combine the film forming and enteric polymers in the ratios of the '974 patent since they teach the combination of similar polymers for the purpose of sustained release of the active agent.”

See Pages 2-4 of the Office Action. Applicants respectfully disagree.

Claim 26 recites the following:

A liquid suspension dosage form comprising:

- a) a first portion of particles containing an NSAID and/or acetaminophen, said NSAID and/or acetaminophen being released from the dosage form in a substantially immediate manner upon contact of the dosage form with a dissolution medium;
- b) a second portion of particles containing NSAID and/or acetaminophen, said NSAID and/or acetaminophen being released from the particles in a controlled manner upon contact of the dosage form with the dissolution medium; and

c) water, or mixtures of water and a pharmaceutically acceptable water-miscible co-solvent selected from the group consisting of glycols, alcohols, and glycerol, wherein said particles in said second portion are comprised of a core that is substantially covered by a coating thereon, and said coating is comprised of a controlled release composition comprising one or more enteric polymers and one or more insoluble film forming polymers wherein the weight ratio of the insoluble film forming polymer(s) and the enteric polymer(s) is from about 80:20 to about 99:1, said first portion of particles and said second portion of particles are suspended in component c), and the dosage form has a duration of therapeutic effect for at least about 12 hours after administration. (emphasis added)

Such a liquid suspension dosage form is not taught, not suggested, by the '974 Patent or the '969 Patent, alone or in combination.

With respect to the '969 Patent, it fails to disclose, or suggest, a liquid suspension in which such two types of particles are suspended. Second, the particles disclosed in the '969 Patent do not contain a coating that is comprised of a controlled release composition comprising both an enteric polymer and an insoluble film forming polymer. In fact, the '969 Patent does not disclose a particle containing any enteric polymer. Rather, the '969 Patent actually teaches away from the use of such polymers. For example, the '969 Patent states that it desires a "predictable rate which is independent of inter-and intra-subject physiological variations such as pH. . . . The resulting combined immediate-release/sustained-release formulation provides higher reproducibility of drug release rates than other sustained-release dosage forms utilizing conventional enteric sustained-release coating compositions"

See, e.g., col. 5, lines 45-60 of the '969 Patent.

Applicants further wish to address the assertion in the Office Action that "The coatings for the extended release particles [of the '974 Patent] include a mixture of film forming polymers such as cellulose acetate and ethylcellulose while enteric polymers such as acrylic and methacrylic acid copolymers (col. 7, lin. 1-10). The ratio of film forming polymers to enteric polymers is 0.14:0.74 within the limits of the instant claims." See page 4 of the Office Action. Not all acrylic and methacrylic copolymers are enteric polymers. As noted later on page 4 of the Office Action, the acrylic and methacrylic copolymers Eugragit™ L and S are enteric polymers, while Eugragit™ RL and RS are not enteric polymers. The '974 Patent is silent with respect the specific use of enteric polymers in its formulations, let alone a particle having a coating comprised of a controlled release composition comprising both one or more enteric polymers and one or more insoluble film forming polymers as recited in the pending claims.

The Office Action acknowledges that the '969 Patent "is silent to the specific polymers of the instant claims [but] these polymers are well known in the art and can be found in the '616 patent." See Page 4 of the Office Action. Applicants again respectfully disagree. While the '616 patent does disclose coating a particle with both a film forming polymer (e.g., Eugragit™ RS and RL) and an enteric polymer (e.g., Eugragit™ S and L), the '616 Patent discloses using them at a ratio of 1:1 (e.g., Table II) and 1:3 (e.g., Table III), which teaches away from the ratio of from about 8:2 to about 99:1 in the pending claims. The increase of the ratio of film-forming polymers to enteric polymers in the coating of the claimed invention allows for a higher level of the insoluble film forming polymer, which is retained upon contact with the intestinal fluids and, thus, provides for a sustained delivery of the active ingredient. A higher level of enteric polymer, and the resulting lower level of insoluble film forming polymer, would result in an enteric release of the active ingredient when the particles reach the intestinal pH of the gastrointestinal tract and thus, likely, a less sustained delivery of the agent.

Lastly, the Office Action asserts that "the pKa and its relationship to the pH of the suspension is an inherent feature that cannot be separated from the components of the instant claims." See Page 5 of the Office Action. Applicants again respectfully disagree. While the pKa of at least one active ingredient contained in said second portion of particles is an inherent feature of that ingredient, the choice of the active ingredient and the pH of the suspension are not inherent, but rather are under the control of the formulator. Applicants have found that maintaining the pH of the liquid suspension pharmaceutical dosage form lower than the pKa of the active agent inhibits the active agent from being solubilized in the suspension, which would otherwise compromise the sustained release property of the coated particles. Accordingly, Applicants assert that the presently claimed invention would not have been obvious to a person of ordinary skill in the art at the time of the claims invention was made in light of these references.

2: Advisory Action

According to the Advisory Action, "Table 2 [of the '679 Patent] shows the combination of enteric polymers with film forming polymers. These film forming polymers can either be water insoluble or water soluble as described in col. 4, lin. 39-68. Applicant argues that the prior art does not disclose both enteric and water insoluble polymer, but as can

be seen the water insoluble polymers can clearly be substituted and combined with the enteric polymer for use as a coating material.” See Page 2 of the Advisory Action. Applicants again respectfully disagree. First, Table 2 does not show an enteric polymer. As stated above, the ‘969 Patent actually teaches away from the use of such polymers. For example, the ‘969 Patent states that it desires a “predictable rate which is independent of inter-and intra-subject physiological variations such as pH. . . . The resulting combined immediate-release/sustained-release formulation provides higher reproducibility of drug release rates than other sustained-release dosage forms utilizing conventional enteric sustained-release coating compositions” See, e.g., col. 5, lines 45-60 of the ‘969 Patent. Further, claim 1 of the ‘969 Patent recites particles “coated with a polymeric material which is pH independent,” not an enteric polymer (which is pH dependent) as recited in the present claims. Thus, as stated above, the ‘969 Patent actually teaches away from the present claimed invention which recites particles comprised of a core that is substantially covered by a coating “comprised of a controlled release composition comprising one or more enteric polymers.”

Accordingly, as the cited prior art actually teaches away from the present claimed invention, Applicants contend that the present claimed invention would not be obvious at the time the invention was made to a person having ordinary skill in the art. Thus, Applicants respectfully request that this rejection under 35 USC 103(a) be withdrawn.

Conclusion

For the foregoing reasons, the present application is in condition for allowance. Accordingly, favorable reconsideration of the amended claims in light of the above remarks and an early Notice of Allowance are courteously solicited. If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned Attorney at the below-listed number.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 10-0750/MCP5015/WEM.

Serial No. 10/697,546

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